



Document #03

Baseline Study Findings

Naas Road / Ballymount /
Park West

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Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council



Rialtas
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1. INTRODUCTION

INTRODUCTION

Introducing the Project

South Dublin County Council (SDCC) and Dublin City Council (DCC) have come together in a joint urban regeneration effort known as the City Edge Project. Located at the western edge of Dublin City Centre in the Naas Road, Ballymount and Park West areas, the City Edge Project covers an area of 700 hectares and is strategically positioned to become one of Europe's largest urban regeneration projects and an attractive extension of the city where people will be able to live, work, and socialise. The regeneration scheme is part of a national strategy to rejuvenate our cities and large towns by concentrating new housing and employment in existing urban areas.

To help achieve this, a team was appointed to prepare a baseline study of the area followed by a strategic framework for how this part of Dublin City can develop over the coming decades. The project team, which includes a wide-ranging suite of experts and consultants, is led by Maccreanor Lavington, who are award winning architects and urbanists based in London and Rotterdam.

This work will consider how the regeneration of the Study Area can support delivery of much needed new homes to cater for the various needs of our growing population, can help Dublin become a climate resilient city, can accommodate the next generation of employment, and can provide liveable spaces that connect seamlessly with the surrounding neighbourhoods.

The regeneration of these lands is in accordance with national and regional planning policy as set out in the National Planning Framework and Regional Spatial and Economic Strategy, which together seek to support compact growth focussed on public transport links.

The project aims to bring innovative solutions to the Study Area, and to champion future-proofing approaches that ensure the long-term success of the area. The Study Area must complement and enhance the existing city whilst delivering equitable growth. The delivery of homes and employment space are key components of this, as is positively incorporating existing businesses in the strategies for the project. The project will also be identifying where catalytic interventions can start the process of regeneration early.

In planning for the future of the area, the integration of existing neighbourhoods with new development will be paramount, in terms of ensuring residential amenity is protected. There will be many advantages for existing and new development including an attractive new urban setting, greatly enhanced amenities such as parks and green spaces, improved access to public transport and increased opportunities for safe walking and cycling.

This area is a major contributor to the Dublin economy already which is a crucial factor which will need to be considered so that a sustainable balance can be struck between new and existing.

One golden thread running through all aspects of the project is sustainability. The scale of the project allows a holistic approach, and one that can tie in coordination of many different aspects such as sustainable transport, active travel, the circular economy, social sustainability, environmental sustainability, climate change resilience, biodiversity and the potential for energy production and storage. This coordination continues through collaboration with SDCC and DCC on these topics and more, tying in with existing strategies as well as developing new ones.

Document Structure

This report is an Executive Summary of the Baseline Report prepared as part of Stage 1 of the City Edge Project and sets out a summary profile of the area as it is today.

The project has had to consider a multitude of topics in order to set up a suitable base for the Strategic Framework. These topics have been categorised into themes to aid legibility:

- Sustainability
- Quality & character
- The liveable city
- Planning policy
- Economy
- Transport & movement
- Environment
- Utilities & Contamination

The information provided in this Stage 1 Executive Summary is supported by a comprehensive Stage 1 report.

2. SUSTAINABILITY

SUSTAINABILITY: A GLOBAL PERSPECTIVE

Sustainability is a global challenge – a challenge that has been evolving to encompass economic and social considerations in addition to traditional environmental concerns.

In 2030, all United Nations Member States adopted the 2030 Agenda for Sustainable Development which 'provides a shared blueprint for peace and prosperity for people and the planet, now and in the future'. At the core of the agenda are 17 high-level Sustainable Development Goals that provide a holistic framework for creating a better world for all. The scale of this masterplan framework means it can have a tangible impact with regards to many of these goals.

ENVIRONMENTAL SUSTAINABILITY

An inescapable responsibility in relation to the development of cities and neighbourhoods is the necessity to respond positively to mitigating climate change. Considering the Study Area area as a whole as opposed to individual building plots significantly increases the capacity to make a positive impact.

National targets

Ireland's Climate Change Action Plan sets a trajectory to achieve the 2030 targets for Ireland. The Action Plan outlines how achieving such targets is multi-faceted. The scale of this project allows it to have a tangible impact across all sectors, including a limited potential to influence the traditional model of agriculture, though local food production on site.

Dublin Climate Change Action Plan

Dublin's local authorities have co-authored a climate action plan for the Greater Dublin Area around the following five themes:

- Energy & Buildings
- Nature-Based Solutions
- Transport
- Resource Management
- Flood Resilience

ENERGY SOURCES

National context

There is currently a gap between the current energy situation and targets to achieve a climate neutral economy by 2050. Over half of energy demands are currently met with non-renewable energy sources. Across building, transport and agriculture sectors, Ireland exceeds emissions per capital when compared to EU averages.

Ireland is set to increase production of renewable energy from circa 30% to 70% by 2030. With this brings the requirement to harness power storage, due to the unpredictable nature of power production. However, indications predict that the demand for electricity will be faster than the introduction of renewables, and thus decentralising power supply and limiting power consumption is an important consideration.

Dublin's energy sources

Currently, energy production in Dublin is predominantly fossil-fuelled, focussed in the Docklands. However, the production of renewable energy is increasing with the waste-to-energy facility, hydro-electric stations and the planned wind turbine array off the coast.

FUTURE TRENDS

The way people and goods move has been evolving due to technological advancements and the need to alter travel habits in the face of climate challenges and a desire for more liveable urban spaces. The success of a long-term strategic framework depends on its ability to respond to these changes. Emerging future trends that can benefit the Study Area include:

- Localised energy production
- The city as a smart system
- Carbon negative buildings

SUSTAINABILITY LESSONS LEARNED

Critical considerations were informed by research and also through a Sustainability Workshop with key stakeholders. Outcomes relating to energy production and consumption, built form and circular economy are described below.

Energy Production

Findings

- Ireland's Climate Action Bill commits to net-zero carbon emissions by 2050
- Ireland is set to increase production of renewable energy from circa 30% to 70% by 2030

Challenges

- Current policies will only reduce emissions by 60% by 2050

Energy Consumption

Findings

- Around 30% of electricity capacity in Ireland is used to power data centres
- Over half of energy consumption is from non-renewable sources
- Construction activities occupy 38% of total energy consumption globally
- Intelligent design combined with energy efficient methods can result in a 30-90% saving in energy consumption

Challenges

- Creating a decentralised energy production network based on renewable sources

Built Form

Findings

- Dense, compact urban development reduces the embodied energy in construction and operation energy costs
- Building orientation and form alongside materials can have the greatest impact on energy demands

Challenges

- Creating carbon negative blocks
- Coordination with landowners to consider the Study Area as whole to increase positive impacts

Circular Economy

Findings

- Considering circular economy processes at an urban scale means many systems and processes can be gathered together at a strategic scale
- Irish Manufacturing Research is piloting an industrial symbiosis project creating a closed loop between beer and bread production

Challenges

- Developing a strategy for the reuse of existing buildings and materials
- Exploit site opportunities for circular energy systems and heat capture

3. QUALITY & CHARACTER

QUALITY & CHARACTER

DUBLIN'S URBAN FORM

Dublin's Urban Form can be characterised by its polycentric development. The city has continued to expand in a radial direction from its core. This has led to the expansion of Dublin's functional urban region into neighbouring counties.

This type of development has been encouraged by the national road network where many roads follow this radial pattern.

The M50 orbital route attempts to support the expansion of this polycentric pattern. However, this route is at capacity and is dominated by private vehicular movement as opposed to public transport.

A RECENTLY CHANGING CONTEXT

The Study Area saw most of its development in the second half of the twentieth century and as late as the 1960s had a character markedly different to that of today. The Naas Road and the Study Area was, up until then, part of the final approach to Dublin, and not a destination in its own right.

The Grand Canal carried its last freight cargo in 1960 and today forms a linear park through this part of Ireland.

A more comprehensive investigation of the history of the Study Area and its historical assets is given in the appendix Heritage Report.

BUILT HERITAGE

There are 28 built heritage sites within the Study Area Boundary. Of these sites five are listed on both the Record of Protected Structures and the NIAH Building Survey, one is listed only on the Record of Protected Structures, and the remaining 22 sites are only listed on the NIAH Survey. Additionally, two of the built heritage sites are further protected as they are included on the Record of Monuments and Places, Bluebell Church and graveyard (BH 2, RMP DU018-033001/2) and Drimnagh Castle (BH 6, RMP DU018-036). These sites are all located to the north of the Long Mile Road and Naas Road.

There are no Architectural Conservation Areas listed within the SDCC Development Plan within the Study Area. The Dublin City Development Plan records three Conservation Areas within the study area.

Drimnagh Castle represents a national asset that could be used to draw on as an attractor, destination and significant local landmark. The Castle is the last surviving moated medieval castle with a flooded moat in Ireland. The Bluebell cemetery also has an opportunity to become an attractor, through an improved setting.

Further buildings of merit and those that are culturally significant that are regarded as local assets have been mapped and recorded. These represent uses and buildings that should be considered for retention thanks to their high quality architecture or positive local role, but also in response to what they can offer the Study Area in terms of identity through what they may produce, their role as landmarks, and their role in the local social and business ecosystem.

With regards to the structures listed within the NIAH survey, which are not listed on the RPS, it is possible that these structures may be added to the RPS at a future date, dependant on the approval of the relevant local authority. Whilst these buildings are not subject to statutory protection, they should still be considered to represent key built heritage constraints. Dublin City Council have an objective to review and consider the recommendations of the NIAH survey as part of their conservation strategy and consideration will also be given to the inclusion of industrial heritage structures of special interest.

Due to the developed nature of the Study Area, very few elements of the former demesne landscapes survive, with the exception of a garden area associated with Drimnagh Castle. Due to the denuded form of these landscapes, they are not considered to represent constraints, with the exception of Drimnagh Castle.

ARCHAEOLOGY

There are seven recorded monuments within the Study Area Boundary. None of these recorded monuments are National Monuments in State Care or subject to Preservation Orders. Two of the recorded monuments are additionally protected as Protected Structures and are also listed in the NIAH Building Survey, Drimnagh Castle (DU018-036, RPS 4832, NIAH 50080448) and Bluebell Church (DU018-033001, RPS 5794, NIAH 50080435).

MORPHOLOGY & HISTORY OF DEVELOPMENT

Naas Road and the Grand Canal have provided the two main defining elements of the site since the eighteenth century, as well as the railway along the northern edge in the nineteenth century, with these providing much of the catalyst for development around them. The Study Area today reflects the transitory nature of these two routes, and the commercial focus they bring. The Study Area was largely developed in the second half of the twentieth century as a fringe condition that could simultaneously service the city of Dublin and the wider country thanks to these transport links.

The morphology of the site reflects the utilitarian nature of the site's predominantly industrial and commercial activity, with rectilinear shedscapes fitting sometimes awkwardly into more organic historic field patterns. Sweeping highway curves, such as along Oak Road, support ease of vehicular movements though these compound the inefficiency and create pockets of redundant space.

THE STUDY AREA TODAY

Built Character

The scale of the Study Area means that it is inherently complex in terms of character and use. However, it has an overarching industrial character that reflects the predominance of industrial and large format commercial buildings. The infrastructure reflects this and performs a supporting utilitarian function. This in turn defines the predominant streetscape and experience within the Study Area of being largely transitory. As the infrastructure has been created largely to support heavy vehicle movements, as well as private through-traffic, it is hostile to pedestrian and cycle traffic. As such the character of the streets is defined more by vehicles than by any pedestrian activity.

Buildings in the area around Park West Road consist of commercial buildings which are set back from the street to allow for a large parking lot in front of the buildings. The buildings are generally of good quality, but create a poor street interface due to the large setback from the street edge.

Buildings in the area around Knockmitten Lane are industrial in character. Many of the buildings make up industrial estates. Many of the buildings are set back from the street edge to allow a small parking lot, and are set behind a metal gate, sometimes including barbed wire, decreasing the quality of the street.

Buildings in the area around Ballymount Road consist of multiple trading estates with the entrance to buildings away from the street in favour of a shared estate internal road.

Buildings in the area around Ballymount Road Lower are in retail use. The newer buildings are of a better quality, with parking in front of the building, and consumer-oriented shops and restaurants.

Character areas

The character of the Study Area falls broadly into four main categories, related to infrastructure:

- Commercial
- Green
- Blue
- Industrial

The Naas Road is defined largely by commercial activity. Despite the presence of the Luas Line this is almost exclusively oriented towards vehicular access. This character defines and dominates much of the rest of the Study Area.

Lansdowne Valley and Greenhills provide a green edge to the Study Area, and there is even farmed green space within the Study Area. However, there is overall a low quantum of green in the Study Area.

Blue infrastructure is defined mainly by the Grand Canal. Along its length – as well as where it can be crossed – this forms a recognisable character for the Study Area. The Camac River supports this character, though is largely hidden at present.

Pockets of residential areas create a disjunct with these overarching characters, many of which sit cheek-by-jowl with the industrial shedscape.

While moving through the Study Area there is a perception of different character zones moving in an east-west direction, becoming progressively more open and larger-scale.

- This was primarily reinforced by the Naas road itself. The wide, extensive thoroughfare divides the overall Study Area in two. It also appears as a linear hub of retail, commerce and other activities.
- To the north the Grand Canal acts as a strong natural element which also moves in an east west direction. The canal facilitates movement along its edge as well as barge movement on the water.
- To the southern edge of the Study Area is Tymon park. This large suburban park lies adjacent to the M50. The park as well as dense forested growth, along Greenhills Road, gives the perception of a green linear band. The width and character of this road gives it an almost rural feel.

QUALITY & CHARACTER LESSONS LEARNED

Severances

The Study Area has four significant severances, all running in an east-west direction. These linear elements hinder movement across them. The central severance is the Naas Road itself which is very difficult to cross.

This results in areas on either side of these lines being cut-off from one another.

Poor North-South Connection

There are large residential areas which lie north and south of the Study Area. The aforementioned severances within the Study Area hinder movement in the north-south direction, between these residential areas. The severances are pierced in only a few places and there is only one continuous north-south link which moves through all of the severances; this route – Walkinstown Avenue / Kylemore Road – travels from Walkinstown Roundabout, through the Study Area, and into Ballyfermot. However, this link has poor pedestrian and cycling infrastructure.

Poor Blue & Green Connections

The Study Area is surrounded by several prominent public green spaces in its immediate vicinity. Currently the Study Area acts as a barrier as opposed to a connector between these green spaces.

The Study Area also has significant waterways running through it which could potentially be rich riparian corridors. However, the majority of these are either culverted or not accessible/visible.

Programme Mix

The Study Area has a mix of uses despite its perception of being a monoculture industrial zone. The rich mix of businesses creates a positive economic ecosystem.

The primary land use within the Study Area is retail & wholesale retail, with a small amount of residential. There is a lack of social infrastructure within the Study Area.

Urban islands

The circulation of the Naas Road is defined by the main arterial roads which run through the Study

Area. These roads primarily offer a transitory experience, carrying people through the Study Area rather than into it. These main roads generally run radially from the roundabout located at the intersection of the Naas Road and the Long Mile Road.

This leaves a series of urban islands of various scales which are somewhat isolated from each other. The urban form within these blocks is poor; generally a labyrinth of linear roads with many dead ends making these blocks difficult to traverse.

CHALLENGES

The severance imposed by important infrastructure will be challenging to overcome without significant investment and coordinated infrastructural enhancements.

Resolving connectivity issues is necessary to sustain good growth.

Ensuring development brings a mix of uses, not simply dormitory residential or mono-functional employment space.

Overcoming a cultural acceptance of car use in order to develop a higher quality public realm and urban form.

OPPORTUNITIES

The Study Area brings great potential for developing its character in the context of the wider city, creating a more attractive place for visitors and to become a destination, using assets such as Drimnagh Castle. It can move beyond its utilitarian role and transitory qualities to become an attractor in its own right, and complement the city centre.

The opportunity to develop across the Study Area brings with it the chance to unravel and overcome many of the challenges, so long as a coordinated approach is maintained to ensure that developments are outward looking, and that infrastructure is upgraded in tandem. These

include enhancing connections to resources and the wider context; introducing natural infrastructure; enhancing land use mix.

NEXT STEPS

Much of the cultural and social fabric and the employment activity of the Study Area is hidden from view during the time of restrictions associated with COVID-19, and should restrictions be lifted and activity return, a closer examination of the local assets and businesses will be undertaken.

3. THE LIVEABLE CITY

THE LIVEABLE CITY

Liveability is shaped and influenced by a wide range of things such as the quality and character of our homes and neighbourhoods, the amenities available to us, local services and travel.

The National Planning Framework sets out 10 National Strategic Outcomes and Public Investment Priorities, which include topics related to the Liveable City. These include:

- Compact growth
- Sustainable mobility
- Access to Quality Childcare, Education and Health Services

Desirable places offer choice, and liveable areas give choice at a local level. Reducing the need to travel great distances for day to day resources. The concept of a 15 minute city supports the need for amenities and resources, offering these locally but also within easy reach by public transport from further afield.

These concepts and topics are something that the Study Area and its scale has a real ability to incorporate and therefore the analysis in this section sets out what gaps there are with regards the Liveable City. This section provides analysis and commentary regarding demographics, housing, and social infrastructure situated within and around the study area.

POPULATION

The Study Area is located within the local authority areas of South Dublin County Council (SDCC) and Dublin City Council (DCC). As identified by the 2016 Census, the total population of the SDCC area was 278,767 persons, with the DCC area having a total population of 554,554 persons. During the period 2002 – 2016, the population growth for SDCC and DCC was c.13% and c.9.5% respectively.

As per the 2016 Census, the Study Area lands had a cumulative population figure of 4,945 persons. Of the total population in the Study Area, 50.6% (2,500 persons) were male and 49.4% (2,445 persons) were female. The population density of the Study Area was c.520 persons per sq.km.

AGE STRUCTURE

The Study Area population was characterised by a high proportion of young persons aged 0-24 years at c.29%, while just over one-third of the population (c.37%) were aged in the 25-44 years range. As a result, a total of c.66% of all persons were aged 0-44 years which represented two-thirds of the Study Area population. Persons aged 64 years and older accounted for c.13% of the population.

HOUSEHOLD COMPOSITION

There was a total of 1,639 households in the Study Area. The average household size in the Study Area was 2.8. The most common household size within the Study Area was 'Two Persons' which accounted for c.26% of all households with 'One Person' households representing c.22%. Taken cumulatively, c.89% of all households resided in a household size that ranged between 1-4 persons. The household category of 'Married Couples with Children' accounted for the highest percentage of the Study Area households at c.24%.

EDUCATION & EMPLOYMENT

A total of 2% of the Study Area population had no formal education. In terms of Third Level educational achievement, just over 9% of the Study Area population had achieved an Honours Bachelor's Degree. In terms of 'labour force participation', c.66% of the Study Area were situated within this category.

In relation to Industry Groups, 23% of the Study Area population were situated in the 'Professional Services' group, followed by 'Commerce and Trade' at 22% while 'Manufacturing Industries' represented c.8%. Nearly one-quarter of the Study Area population, at 24%, held a 'Managerial/ Technical' position. The private car was still the most popular form of transport for Study Area residents when travelling to work at c.42%. Bus, train, DART/Luas accounted for c.23% of journeys.

HOUSING STOCK PROFILE

The Study Area had a total residential stock of 1,757 no. units as recorded by the 2016 Census. In terms of housing typology, the ratio of houses to flats/apartments in the Study Area was generally 75:25 in favour of houses, with 73% of all Study Area households residing in a traditional dwelling (either detached, semi-detached or terrace).

The residential stock in the Study Area can generally be divided into two separate groups being: (i) Pre-1981 and (ii) 1981 onwards. In total, c.54% of the Study Area population lived in a property that was built before 1981 with c.7% residing in a Pre-1919 property. Properties built from 1981 onwards accounted for c.40% of the Study Area population overall. In terms of tenure, private owners with a mortgage or loan accounted for 22%, with private ownership without a loan or mortgage accounting for 31% of all households. Privately rented stock represented 28% of all households, while 10% of the total tenure accounted for properties rented from a local authority.

RESIDENTIAL LAND USE ANALYSIS

An analysis of existing planning permissions for large scale residential/mixed use developments (in excess of 100 no. residential units) was undertaken for Study Area lands. The analysis undertaken identified that no permissions for large scale development, as referred to, existed in the South Dublin County Council portion of the Study Area. Planning permissions exist at the following locations:

- Royal Liver Retail Park, Old Naas Road (Mixed use development comprising 1,102 no. units including Build-to-Rent and Shared Accommodation);
- Concord Industrial Estate, Naas Road (Strategic Housing Development of 492 no. Build-to-Rent units);
- Carriglea Industrial Estate, Muirfield Drive (Residential development of 371 no. units);
- Lands east of Assumption National School, Long Mile Road (Strategic Housing Development of 153 no. units);

- Old Naas Road Cottages (Residential development of 103 no. units); and
- Junction of Walkinstown Avenue/Naas Road (former Nissan site) (Mixed use development comprising 1,123 no. units including Build-to-Rent accommodation).

The potential residential development in the Study Area cumulatively represents a figure of 3,344 no. units, which is 1,587 no. units more than the existing residential stock in the Study Area. Of the total figure as referred to, Build-to-Rent accounts for c.38% of all approved units. The accommodation breakdown of total approved residential units is as follows:

- Studio units: 255 no. (c.8%)
- 1-bed units: 1,172 no. (c.35%)
- 2-bed units: 1,715 no. (c.51%)
- 3-bed units: 202 no. (c.6%)

Cumulatively, 1-bed and 2-bed units account for well over three-quarters (c.86%) of all approved residential units in the Study Area, with a low level of 3-bed units (c.6%) coming forward. A total of 645 no. units have been approved under the fast track Strategic Housing Development process.

From the analysis undertaken, it is noted that a cluster of potential large scale residential development is forming around the Naas Road Kylemore Road/Walkinstown Avenue axis in the eastern portion of the Study Area. A wider analysis of areas in proximity to the Naas Road area also revealed that Strategic Housing Developments and Build-to-Rent accommodation is being brought forward in areas such as Drimnagh and Ballyfermot.

4. PLANNING POLICY

PLANNING POLICY

An overview of the policy and guidelines framework concerning the Study Area is set out as follows.

PROJECT IRELAND 2040

Project Ireland 2040 is comprised of the National Planning Framework (NPF) and National Development Plan (NDP). The NPF succeeds the National Spatial Strategy 2002-2020 and provides a long term strategy for the spatial development of Ireland. The NDP has been brought forward to drive Ireland's long term economic, environmental and social progress and fully integrates with the policy aims of the NPF.

REBUILDING IRELAND – ACTION PLAN FOR HOUSING AND HOMELESSNESS 2016

The Action Plan for Housing and Homelessness was published under the Government's Rebuilding Ireland Initiative and represents a high level response to address the current shortfall in housing provision by seeking to accelerate the delivery of housing units. The acceleration of the delivery of housing for the private, social and rented sectors is a stated priority for the Government.

The Rebuilding Ireland Initiative will be replaced by the new 'Housing for All' strategy in September 2021. This will continue the focus on housing delivery with updated targets.

CLIMATE ACTION PLAN 2019

The Climate Action Plan sets out an ambitious course of action over the coming years to address climate disruption. The Action Plan outlines the current state of play across key sectors including electricity, transport, built environment, industry and agriculture and charts a course towards ambitious de-carbonisation targets.

EASTERN AND MIDLAND REGIONAL ASSEMBLY – REGIONAL SPATIAL AND ECONOMIC STRATEGY 2031

The Eastern and Midland Regional Assembly (EMRA) Regional Spatial and Economic Strategy (RSES) provides the regional basis for the integration of land use and transport planning in the Study Area, informing the preparation and implementation of plans, programmes and projects at all levels. The RSES contains the Dublin Metropolitan Area Strategic Plan (MASP) which seeks to ensure a supply of strategic development areas located at key nodes on public transport corridors for the sustainable growth in the Dublin Metropolitan Area.

SOUTH DUBLIN COUNTY DEVELOPMENT PLAN 2016 – 2022

The South Dublin County Development Plan (CDP) designates the Study Area lands within its jurisdiction under two zoning objectives that facilitate enterprise and/or residential-led regeneration (Objective REGEN) and enterprise and employment related uses (Objective EE). The CDP sets out that it will support the regeneration of the Naas Road industrial area by promoting more intensive enterprise and/or residential led development at locations proximate to town centres and transport nodes.

DUBLIN CITY DEVELOPMENT PLAN 2016 – 2022

The Dublin City Development Plan (CDP) designates the Study Area lands within its jurisdiction under a number of zoning objectives including Z2 (Residential Neighbourhoods – Conservation Areas); Z6 (Employment/ Enterprise); Z9 (Amenity / Open Space Lands / Green Network); and Z14 (Strategic Development and Regeneration Zone). Within the CDP, the Naas Road is identified as one of eight Key District Centres (KDC).

MINISTERIAL GUIDELINES

Guidelines issued under Section 28 of the Planning & Development Act 2000 (as amended) includes, inter alia:

- Urban Development and Building Heights Guidelines (2018) which set out a presumption in favour of buildings of increased height in city/town cores and other urban locations with good transport accessibility; and
- Sustainable Urban Housing: Design Standards for New Apartments (DSFNA) (2018) provides national guidance in relation to standards for apartment development, with its aim to ensure that apartment living is an increasingly attractive and desirable housing option for a range of household types and tenures resulting in greater delivery of apartments in Ireland's cities and towns.

TRANSPORT STRATEGY FOR THE GREATER DUBLIN AREA 2016 – 2035

The Transport Strategy for the Greater Dublin Area provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area over the next two decades. The Strategy is an important document for the regeneration of the Study Area given its location adjacent to the M50 Motorway, and level of sustainable transport modes provided by rail and Luas lines, and bus network.

PLANNING POLICY KEY FINDINGS

Challenges

- At a high level, a challenge exists in relation to the current provision of planning legislation, planning policy and associated planning guidance documents as it is considered the existing framework is not sufficiently robust in order to deliver successful regeneration outcomes for the study area and that legislative/policy reform is required in order to deliver a new mixed use location in the Study Area.

Opportunities

- Effective implementation of the Affordable Housing Bill 2020 and Land Development Agency Bill 2020 has the potential to create new opportunities for the increased supply of new homes in the study area that will assist with facilitating housing choice.
- The provisions of the Affordable Housing Bill in relation to affordable purchase on local authority land, an affordable purchase equity scheme and a new Cost Rental Scheme, for example, can assist with the development of strategic housing objectives for this tenure in the study area.
- Restriction on shared accommodation/co-living tenure will be advantageous for the study area in the long term in respect of creating sustainable communities and preventing the development of transient populations.
- Covid-19 pandemic has created an opportunity for policy reform, particularly in relation to housing, and this may translate into policy benefits for the future study area.

5. ECONOMY

ECONOMY

LOCAL AUTHORITY CONTEXT

Dublin City Council is largest local authority in Ireland and generates a substantially higher Gross Value Added (GVA) per head of population than any other local authority due to the heavy concentration of high-tech (IT, digital media, pharmaceuticals for example), financial and professional services and public services such as Government, utilities and third level education. As of 2016, the total number of businesses in Dublin City stood at c.22,600 which accounted for a total of c.54% of all businesses situated within the four Dublin local authorities. As part of the Dublin Metropolitan Area, the economy of South Dublin is heavily integrated into that of the wider Dublin region with over 80,000 jobs located in the County with the total number of businesses in South Dublin around 6,800.

STRATEGIC LOCATION

The Study Area is situated within the Dublin Functional Urban Region and Economic Core Area and occupies a strategic location relative to the M50 motorway and N7 economic corridor and short distance to Dublin City Centre to the north east. The Study Area, by its traditional land use typology, has a conglomeration of industrial estates and business parks within a pattern of low-medium intensity development with smaller pockets of residential development pepper-potted throughout. The industrial estates and business parks have access to high quality existing and planned public transport, infrastructure and services and are located in close proximity to Dublin City Centre. Land uses in the Study Area have evolved over time from industry and manufacturing to primarily sales and logistics, and the Study Area attracts a high volume of commuter employees on a daily basis.

STUDY AREA EMPLOYMENT

As identified by the 2016 Census, there were approximately 25,000 jobs in the Study Area. In total, there were 16,077 workers (c.64%) in the South Dublin County Council area and 8,991 (c.36%) workers in the Dublin City Council area. There are 4 no. Seveso sites located within the Study Area which are operated by BOC Gases Ireland Ltd, Irish Distillers Ltd, Kayfoam Woolfson and Iarnród Éireann and these companies are key employers in the area. Other primary employers within the Study Area include, inter alia, An Post, FBD Insurance and UPS.

The 'Wholesale/Retail Trade' industry accounted for the highest number of employees at 10,139 which represented c.40% of total employees in the Study Area. This was followed by the 'Information and Communication/Financial' industry group that represented a total of 5,426 workers (c.22%).

CONTRIBUTION TO THE ECONOMY

The Study Area makes a significant contribution to the economy of Dublin. It is estimated that the salaries generated by c.25,000 employees across the various industry groups in the Study Area accounts for c.€1.05 billion annually. When comparing the employment figures for Dublin (encompassing the four local authorities) as provided at the beginning of this chapter, and the employment figures for the Study Area, it was identified that the Study Area accounted for c.4% of all jobs in 2016. In terms of Gross Value Added (GVA), the figure for the Study Area is estimated to represent c.€1.9 billion however this figure rises substantially when foreign-owned enterprises are included. When applying the total GVA figure for Dublin, which accounted for c.€110 billion in 2018, the Study Area is estimated to represent c.2% of Dublin's total GVA. The Annual Rates Valuation for South Dublin County Council equates to €22,103,184, with the figure for Dublin City Council at €41,064,585.

KEY ECONOMIC ASSETS

There are four primary industrial estates in the Study Area which comprise various smaller industrial/business areas/parks and these are set out as follows:

- **Western Industrial Estate & Business Park** is a long established and high profile industrial and commercial location. The estate is situated within the western portion of the Study Area and adjacent to the M50 (Junction 9).
- **John F. Kennedy Industrial Estate** is situated off New Nangor Road/Naas Road within a centre-north location in the Study Area.
- **Ballymount Industrial Estate** is located within the southern portion of the Study Area and is the largest of the four industrial areas.
- **Park West Industrial Park** is situated within the northern portion of the Study Area.

The Study Area has a variety of commercial and retail properties. Ballymount Civic Amenity Site is located within Ballymount Industrial Estate. Drimnagh Castle Primary and Secondary Schools are located within the Study Area on Long Mile Road with Drimnagh Castle situated adjacent and north of the aforesaid schools. The Study Area is situated in close proximity and to the west of three hospitals being St. James' Hospital, Coombe Women's Hospital and Children's Hospital Crumlin.

LAND USE TRANSITION

The economic outlook for the future Study Area is envisioned to gradually transition towards attracting more high density, new and emerging business sectors as part of a new mixed use quarter. The regeneration process will seek to utilise new methods and concepts that can bring forward new homes and jobs where the local community can live and work alongside one another. This can be delivered through new mixed use typologies at site and neighbourhood levels, for example, within a place/people-led approach. The transition of the Study Area's future economy is likely to be one that presents both opportunities and challenges over the long term.

CAPACITY FOR GROWTH

A key factor in determining the capacity for growth within the Study Area relates to the desire of landowners to sell lands and/or vacate business premises. At a very early stage of the process, there has been some intimation from a number of landowners of their potential willingness to sell some of their land holdings within the Study Area. This is a positive step and it also allows for lands to be potentially earmarked for redevelopment within the early phases. Conversely, there is also the realistic situation where landowners and/or businesses are not open to selling or vacating their lands for various reasons and this scenario will have to be further considered as part of the overall regeneration process.

The relocation of existing business enterprises to new premises outside the Study Area is an important component in releasing suitable development lands. Many businesses have been in operation within the Naas Road for a long period of time and the idea of relocating may appear challenging. There is also the view that some existing companies may embrace the opportunity for relocation outside the Study Area and are open to exploring same.

6. TRANSPORT & MOVEMENT

TRANSPORT & MOVEMENT

GENERAL

This section provides a summary of Transport & Movement considerations established through comprehensive baseline and visioning exercises undertaken by the project team.

EXISTING TRANSPORT INFRASTRUCTURE

Road: key strategic road corridors are at or reaching capacity, with a strong demand for east-west radial movements.

- The M50 is parallel to the Study Area's western boundary, routing from Dublin Port via Dublin Port Tunnel before circling northern, western and southern suburbs.
- The N7 provides a strategic link between the M50 and Greater Dublin area and the west and south-west of Ireland. It connects to Naas Road via the Red Cow Roundabout Interchange which allows east-west traffic to travel uninterrupted.
- There are four regional routes through the Study Area: R110 Naas Road / Long Mile Road; R134 Nangor Road, R112 Kylemore Road / Walkinstown Avenue and R819 Greenhills Road.

Public Transport: public transport services are well used and operate at or near to capacity during peak times. Service enhancements are required to cater for existing demand and provide capacity for growth. A large portion of the Study Area is within a 10 to 15-minute walk of a Luas, rail or bus station / stop.

- *The Luas Red Line* bisects the Study Area and connects to the city centre, running along the Naas Road before turning northeast along Davitt Road (outside the Study Area). There is a 2km distance between Kylemore and Red Cow stations. Kylemore, Bluebell and Blackhorse are located within the Study Area, with Red Cow and Kingswood accessible within a 10 to 15-minute walk from western areas of the Study Area. Services route into the city centre every three to five minutes during peak times with a journey time of approximately 15 minutes.
- *Rail:* the Kildare Line heavy rail corridor runs parallel with the Study Area's northern boundary.

Park West & Cherry Orchard railway station sits on the north-western periphery of the Study Area and is served by several Cork and Waterford InterCity services alongside commuter services to Heuston and Grand Canal Dock.

- *Bus:* the Study Area is well served by a number of bus routes with stops on Naas Road, Long Mile Road, Walkinstown Avenue, New Nangor Road, Kylemore Road, Greenhills Road, Ballymount Road Lower and Park Road West. BusConnects will provide two Core Bus Corridors running in an east-west direction and an Orbital Route running in a north-south direction serving the Study Area.

Walking: footpaths are present on all roads on at least one side of the carriageway. Regional roads (Naas Road, Nangor Road, Long Mile Road and Greenhills Road) typically have footpaths on both sides of the carriageway and designated controlled pedestrian crossing facilities.

Cycling: cycle infrastructure is present on some of the regional and local primary roads; however, on most roads, cyclists are required to share traffic lanes. Cycle facilities in the Study Area are generally not continuous, making end-to-end trips less attractive for cyclists. Existing carriageways provide a sense of car dominance. The M50 Greenway proposed as part of the Cycle South Dublin Initiative, will run along the western boundary of the study area.

PROPOSED TRANSPORT INFRASTRUCTURE

BusConnects and DART+ are proposed under the National Development Plan which will serve a level of demand from existing and new development; however, intensification of development may drive a need for additional public transport services.

BusConnects seeks to transform Dublin's bus network through a 10-year programme to provide an efficient, reliable and integrated bus system with enhanced capacity. It would improve the Study Area's bus accessibility with three routes serving the Study Area:

- *CBC08*: Clondalkin to Drimnagh (routes via Nangor Road and Long Mile Road);
- *CBC09*: Greenhills to City Centre (routes via Greenhills Road and Calmount Road to meet CBC08 at Walkinstown Roundabout); and
- *Orbital Route S4*: Liffey Valley Bus Interchange to UCD Bus Interchange, routing in a north-south direction via Kylemore Road.

DART+ has the potential to increase capacity on the Kildare Line from 4,500 to 14,000 passengers in peak hours by 2027. The potential for a new station near Kylemore Road is being investigated, with delivery uncertain. This creates an opportunity for a high-density development 'corridor' along Kylemore Road linked to the Luas Red Line Kylemore Station. This 'corridor' would be served by the BusConnects orbital bus route.

A separate study will assess DART Underground which forms part of longer-term rail enhancement considerations under Project Ireland 2040. A new station at Inchicore Works forms part of the DART Underground project. This would benefit the Study Area through its proximity and potential for improved accessibility across the Greater Dublin Area. It is recognised that this is a long-term project with limited certainty regarding delivery timescales.

TRAVEL PATTERNS

Trip Distribution for peak periods has been assessed using origin and destination trip profiles from 2016 POWSCAR data. More people arrive to the Study Area than depart, reflecting that employment uses dominate with employees travelling to the area for work.

Areas where a large number of trips start or finish include Dublin City (22% origin, 36% destination), South Dublin (30% origin, 29% destination), Kildare (10% origin, 2% destination) and Fingal (8% origin, 4% destination). Approximately 15% of trips are internal to the Study Area.

Mode Share of trips departing and arriving in peak periods has been derived from the National Transport Authority (NTA) Eastern Regional Model (ERM) and based on Census of Anonymised Records (POWSCAR) data. As an origin in the morning peak, 58% of trips are made by car with 13% and 29% by public transport and active modes respectively. In the afternoon peak, almost three quarters of trips are car-based (72%) as longer distance commuters travel from the Study Area.

As a destination in the morning peak, 71% of trips are made by car with 8% and 21% by public transport and active modes respectively. In the afternoon peak, the percentage of trips made by car drops to 65%, with more shorter distance trips made by public transport, cycle and on foot.

MOVEMENT KEY FINDINGS & CHALLENGES

Vehicular traffic

Findings

- Strong links to National and Regional Road Network
- Existing land-use and transport infrastructure is predominantly car orientated
- Limited north-south connectivity

Challenges

- Manage operations on strategic national road network
- Overcome severance corridors whilst preserving their current function e.g. Naas Road
- Timeline for delivery of update to TII's N7 Red Cow Junction Access review

Public transport

Findings

- Serviced by heavy rail, light rail and frequent bus services.
- Five heavy rail services stop at Park West & Cherry Orchard in the peak hour.
- Luas every three to five minutes. The 2km distance between Red Cow and Kylemore stops results in an area along the corridor being underserved.
- Public Transport operates at or near Capacity on peak period services.
- Orbital movements not well served by Public Transport

Challenges

- Masterplan vision is heavily dependent on public transport capacity improvements
- Timeline for delivery of update to NTA's GDA Transport Strategy review
- Capacity of existing Luas services is limited due to existing demand and high density development proposals along the corridor e.g. Tallaght and Fortunestown.

Street infrastructure

Findings

- City centre is 25-30min cycle ride and accessible by Grand Canal Cycleway
- Severance effect
- Limited north-south connectivity for all modes
- Lack of integrated cycle network

Challenges

- Funding and delivering critical infrastructure required to create a permeable street network
- Phasing active mode infrastructure to provide continuous routes

7. ENVIRONMENT

ENVIRONMENT

Green Infrastructure

Within the Study Area there is limited green cover - approximately 13% green with the rest sealed, impervious paved surfaces.

Walkinstown Avenue Park to the east is the main park within the Study Area. Lansdowne Valley Park is a more naturalistic park within the Study Area.

The other green spaces within the Study Area are piecemeal, vacant plots of open grassland not generally accessible to the public.

There is a lack of tree canopy cover within the Study Area.

Surrounding the Study Area there are a few larger parks including Tymon Park and Ballymount Park as well as Phoenix Park to the north however connection to these from within the Study Area is not intuitive.

Dublin is currently ranked 21st overall in the European Green City Index.

Blue Infrastructure

The Grand Canal is the most visible blue asset within the Study Area. There is a tow path to the south, however, this is perceived as quite unsafe as it is cut off by dense vegetation in stretches and not overlooked. It is an under utilised asset.

The Camac River, a tributary to the River Liffey runs through the Study Area however approximately 50% of its length is culverted beneath the industrial development. Where it is open it is a generally very narrow corridor sandwiched between industrial sites.

The Camac is an important part of Dublin's history as paper mills were located along the river.

There are pressures on the Camac including waste and high levels of urban run off. The flood plain has been built on so flooding occurs which is likely to increase with climate change. The Camac Water Framework Directive and flood alleviation scheme by Dublin City Council seeks to naturalise the river and re-establish the flood plain.

Park Accessibility & Coverage

There is a lack of public parks and programmed green space within the Study Area.

Currently the Study Area is predominately in industrial use with some residential areas on its edges. In planning development within the Study Area, consideration will need to be given to increasing park provision to meet the future needs of mixed use and residential development.

The Naas Road, M50 and in some ways the Grand Canal create barriers to movement across the Study Area so this needs to be considered in the development of connected open space and circulation framework.

Archaeology

There are seven recorded monuments within the Study Area Boundary.

There is potential for sub-surface elements of historic sites to survive within the Study Area.

The field inspection did not identify any previously unknown archaeological features at the extant sites or at the two green areas; however, the watercourse present at each of these locations lend them archaeological potential.

Statutory designated sites

There are a number of Special Areas of Conservation and Special Protection Areas around Dublin, though none in the Study Area.

Watercourses

River Camac

The proposed Study Area includes the River Camac which is at risk of not meeting surface water environmental objectives under the Water Framework Directive. The water quality report from 2010-2015 shows that the river has a poor ecological status.

Grand Canal

The overall surface water ecological status of the canal remains 'good'.

KEY OPPORTUNITIES

Key opportunities were identified during the Baseline and Visioning exercises which will inform the Strategic Framework:

- Set ambitious quantitative targets for the area eg. 50% green cover (Green and Blue Infrastructure, Open Space, Street Planting and on plot greening) to guide the framework and set future development to be a climate resilient, carbon neutral example of future city planning.
- There is an opportunity to deliver a large public space / gesture which could be critical to creating a liveable setting and an identity that will be key in attracting investment
- Utilise and celebrate existing water ways to establish strong landscape identity for this regeneration area and create settings for new homes and businesses.
- Look at ways to create new water way connections or marina basins off the Grand Canal to utilise this heritage and biodiversity asset to create settings, manage water and provide landscape focus to new communities.
- Undertake the Camac River naturalisation and flood alleviation scheme to create a multi-functional biodiverse corridor running from the Lansdowne Valley Park through the Study Area as a major Green & Blue Infrastructure and amenity asset and in turn improving the water quality.
- Improve the Grand Canal as a biodiversity and movement Super Greenway (walking and cycling) in and out of city.
- Create north- south connections of green spaces to link Phoenix Park to Tymon park as a habitat and green movement corridor.
- Understand any existing remnant habitats and the wildlife they support to discover what wildlife habitats are the most suitable to create in and through the area.
- Explore urban farming/ food growing as part of theme and opportunity of bringing new communities together.
- Explore scenarios for the open space network and hierarchy to best provide for the new and existing surrounding community needs and new identity. Eg. Is it one large central park to provide for the new area and become a destination for Dublin or is it a chain of parks that provides identity to each new neighbourhoods and act as gateway projects.
- Consider heritage to reflect the past history of the site where appropriate.
- Set out an urban greening and tree strategy that helps transform the visual qualities and character and improve the area's resilience to climate change, provide carbon sequestration and mitigate the urban heat island effect.
- Identify seed or start/ advanced/ priority landscape enhancement projects as catalyst for change in the area.

8. UTILITIES & CONTAMINATION

UTILITIES & CONTAMINATION

POTABLE WATER

The Study Area is served by Belgard Reservoir and Cookstown Reservoir. Belgard Reservoir is located approximately 4km Southwest of project area. The capacity of Belgard reservoir is 10,000 m³ and is fed by a 1200mm-diameter pipeline from Saggart Reservoir. Cookstown Reservoir has a capacity of 74,000 m³ and is fed by a 27"-diameter dedicated pipeline from Saggart Reservoir and a 600mm-diameter branch off from 1200mm-diameter Belgard Reservoir feeder. There are 4 main trunk mains passing through the project area.

Irish Water published the National Water Resources Plan – Draft Framework Plan in 2020. The Dublin City and suburbs estimated population growth rate is approx. 1% per year up to 2044. This can fluctuate considerably from area to area within the Greater Dublin Area (GDA) depending on development proposals.

The total current average daily demand is approx. 6,900m³/day or 6.9Ml/day based on District Meter Areas (DMA's) revenue figures provided by Irish Water. This demand is based on approx. 4,945 residential population and 25,068 current jobs in the area.

In 2014, Irish Water embarked on a four-stage process to identify a suitable new source of water supply for the Eastern and Midlands Region. The Parteen Basin scheme comprises the abstraction of water from the lower River Shannon at Parteen Basin in Co. Tipperary, with water treatment nearby at Birdhill. Treated water would then be piped 170km to a new termination point reservoir at Peamount in South County Dublin, connecting into the GDA. This connection watermain from Peamount will likely pass through the Masterplan area and could be potentially used to meet the increased demand as a result of the development. This will be subject to review and planning by Irish Water.

Based on discussions with Irish Water, it is understood that there is circa 8ML/day of available capacity in the existing 600mm dia and 18" dia. watermains from Belgard Reservoir. Through water management measures, it is considered that this capacity can service the Masterplan in the short term. How far into the future this capacity will

service the area depends on the staging of the masterplan development. Irish Water's current strategic plans include the use of additional supply from Peamount Reservoir to service the development. Additional localised reinforcements will be required to service local areas.

WASTEWATER NETWORK

The project area is mainly served by the 9B Sewer which conveys flows to the Grand Canal Trunk Sewer (GCTS) at Davitt Road. The 9B Sewer passes through the project area in an easterly direction.

Approximately, 80% of the project area is served by the 9B Sewer via either direct connection or through the collector networks. The 9B Sewer was designed as a separate (foul only) system and is currently operating at its design capacity. Due to misconnections of surface water, significant contribution of rainfall induced infiltration has been measured. High trade flows also negatively affect the spare capacity of the system. The sewer is now under-capacity for its purpose.

The Greater Dublin Strategic Drainage Study (2005) identified a number of options for upgrades within the 9B sewer system.

An unverified preliminary InfoWorks ICM foul network model of the project area has been built by the project team. Irish Water InfoNET snapshot file was the main source of network configuration. The aim of the model is to simulate the existing baseline scenario and to consider the impact of the masterplan development on the existing sewer system and the level of upgrades required.

Irish Water provided flow monitor information along the 9B Sewer within Lansdowne Valley Park. Average DWF observed flow in 9B Sewer is approx. 520 l/s with a maximum observed value of 2.28 m³/s. Sewer network simulations provided the contribution of the project area to the 9B Sewer flows and its draining subcatchments.

SURFACE WATER NETWORK

The Project area is mostly served by an extensive separate surface water network. The River Camac passes through the project area in east-west direction and forms the backbone of this network along with its tributaries. These tributaries and streams include:

- Gallanstown Stream,
- Walkinstown Stream,
- Ballymount Stream,
- Robinhood Stream, and
- Drimnagh Castle Stream.

The River Camac enters the project area at M50/Nangor Road overpass and runs beneath Grand Canal on the Northern end of Lansdowne Park towards Heuston Station where it finally discharges to River Liffey. Nearly all of the project area is part of the River Camac. Considering the high level of imperviousness in the project area due to industrialization, surface water contributions to the River Camac is significantly higher than greenfield runoff rates.

Contribution to the River Camac's 1% AEP flow is computed by InfoWorks ICM simulations and the most critical event is determined as a rainfall with 180 minute duration. The highest observed discharge contribution at the downstream of Lansdowne Park is simulated as approx 15m³/s. The equivalent greenfield runoff (QBAR) of the River Camac catchment within project area is calculated as in excess of 1m³/s. A QBAR with 100-year return period was calculated as approx 2.5m³/s.

Successful implementation of SuDS components will effectively control the excess peak runoff discharging to River Camac by increasing the water quality. SuDS will also enhance the biodiversity of the project area and create new opportunities to public amenities. The Greater Dublin Regional Code of Practice for Drainage Works states that all surface water discharges shall be limited to 2l/s/ha or the use of Qbar for the proposed developments. To satisfy this target, several possible SuDS components can be implemented to proposed developments and retrofitted to the existing developments.

ENERGY

A statistical analysis of the current energy usage within the Study Area has been completed to establish a baseline energy profile for Study Area. The analysis completed was based upon data provided by Codema, Eirgrid, ESB Networks & SEAI. Energy demand information for the Study Area was provided to the Project team by Codema at a CSO Small Area (SA) granularity. Each SA was categorised with respect to residential and commercial electrical and heat demands, with total Energy demand being a measure of the sum of the electricity and heat demand for any building in kWh over the period of an entire calendar year. The commercial demand, and particularly, commercial heat demand is the single biggest draw on energy within the Study Area.

The SEAI "Energy in Ireland 2020 Report" assessed the overarching trends in primary energy requirements in Ireland over the period 2005 – 2019. The report emphasised the changes in the fuel mix used to generate electricity over this period, and also concluded that primary energy consumption in Ireland in 2019 fell by 1.2% on the previous year.

The 2020 energy efficiency targets set by SEAI, which are driven by the Paris Agreement is equal to 20% of the historic average energy use during the period 2000–2005.

HIGH VOLTAGE TRANSMISSION NETWORK

Inchicore Sub-Station serves as the central node of the high voltage transmission network within the Study Area, with approximately 12km of 110 KV/220 KV overhead lines running from the west and south west to the substation.

The EirGrid functional specification for overhead lines derives the allowable development clearance for overhead lines. The exclusion zone clearances for overhead lines provides for an exclusion zone of 36m from any high voltage power lines with a further 8m as a consultation zone. Furthermore, the ESB have indicated that and development inside 60m of 220kv and 46m for a 110kv requires Safety Clearance via consultation with the ESB.

SEVESO SITES

A constraints study report has been prepared to create a baseline of evidence to inform SDCC and DCC on the future development of the Study Area with regards to the potential impact of the future development on any identified Seveso sites and to assess the feasibility of relocating any Seveso sites that may be identified.

A desk top review was undertaken of all available information pertaining to the Study Area and four Seveso sites were identified. One Upper Tier facility associated with BOC Gases located at Bluebell Industrial Estate, Bluebell, Dublin 12 and three Lower Tier Seveso sites including Irish Distilleries located between the Naas Road and the Robinhood Road; Kayfoam Woolfson located in Bluebell Industrial Estate, Dublin 12 and Iarnrod Eireann maintenance workshop located within the Inchicore Works site at Inchicore Parade, Dublin 8.

The four sites have been operating c. 1950s at the earliest and are strategically placed to take advantage of the road networks and retail infrastructure developed in the vicinity of the sites for trade and investment. The risks that the sites may pose to any new or proposed development by remaining in their current location is considered low due to the safety, health and management systems and procedures in place as required under COMAH Regulations.

Under national planning legislation, it is obligatory for planning authorities to consult with the HSA with regards to the siting, modifications or development in the vicinity of Seveso establishments. The HSA have recently put forward a new risk assessment approach to zone development within the vicinity of Seveso sites. Following public consultation and approval on the new guidance, planning authorities may find that further restrictions are placed in the designated zones around each of the sites thus DCC and SDCC may need to consider the type and scale of any new development proposed in the vicinity of the identified Seveso sites.

The main constraints on relocating each of the sites were considered to be associated with potential planning restrictions and costs to relocate; acquire suitable land bank; loss of trade / transport links; potential loss of skilled workforce due to increased commuter distance and location constraints due to type of sites activities.

CONTAMINATED LAND

Potential Contaminated Land/Section 22 Landfills and the associated constraints on the redevelopment of the Naas Road/Ballymount/Park West URDF Masterplan have been reviewed.

There is currently no dedicated general contaminated land legislation in Ireland and contamination issues are generally dealt with through conditions attached to planning permission and through clean up orders issued under Ireland's Waste and Water regulatory regime.

An exception to the above is for EPA licensed sites. The EPA position in relation to the management of contaminated land and groundwater at EPA licensed sites is set out in "Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites."

The principles of dealing with contaminated land are set out in a risk-based approach for the protection of human health and the environment including groundwater.

The risk-based assessment in the EPA guidance comprises 3 main stages:

- STAGE 1: Site Characterisation and Assessment
- STAGE 2: Corrective Action Feasibility & Design
- STAGE 3: Corrective Action Implementation & Aftercare

In determining the Environmental Setting of the area it has been identified that the geology comprises The Lucan Formation, which consists

of dark Carboniferous limestone and shale (calp), and the Quaternary Geology which comprises Glacial till with localised Alluvial deposits and Gravels. The underlying Limestone is classified by GSI as bedrock which is moderately productive but only in local zones.

The primary watercourse in the area is the Camac flowing generally from west to east through the area.

There are 16 Licensed sites within the Study Area and no Section 22 Landfills.

Several historical land uses within the area may have impacted the land locally including Inchicore Railway works and a Gas Works. Current land uses are likely to have a LOW to MODERATE Potential Risk.

5 Pollutant Linkages were identified with MODERATE or MODERATE to LOW risk as a result and in accordance with the current guidance for risk based assessment of contaminated land further quantitative risk assessment would be required at a local level to inform the conceptual site model. In order to quantitatively assess the contaminated land risk it would be necessary to undertake site investigations in line with current guidance such as BS10175. These assessments are likely to be required on a site by site basis which will ensure that the actual local conditions will be determined as the regeneration of the area and the contaminated land risk can be managed specific to the proposed end use and local environmental setting.

9. CONCLUSIONS

CONCLUSIONS

A number of key findings, challenges, opportunities and next steps have been highlighted throughout the Stage 1 phase of the Project. Together, they provide a basis upon which to approach Stage 2 of this Project. As a stepping stone to further investigations in Stage 2, this Conclusions chapter brings together some of these, by layering constraints to determine areas of fixity or complication, before introducing the physical capacity for change that exists. In this way, the many analyses can start to become spatial, and be assessed in parallel with one another.

Careful consideration of constraints has been made throughout the baseline process, culminating with layers of differing constraints. In parallel with these spatial constraints are barriers to movement, to habitats, and also from potential contamination. The M50 is a barrier to east-west habitat, pedestrian, and cyclist movement, whilst the Naas Road is a barrier to north-south habitat, pedestrian, and cyclist movement.

Additionally, further constraints will come into play through intervention, such as with the naturalisation of the Camac river which will require additional space on either side. Related to this, provision of new open spaces as a necessary component of growth will also command space. These will both deliver extensive benefits in tandem, so should not be considered purely as constraints, but also as opportunities that can equally help unlock possibilities.

There are over 500 land owners within the Study Area. This poses challenges with regards coordination of development and with regards equitable distribution of imperative infrastructure and resources.

NEXT STEPS

Stage 2 of the project will draw on the key findings, challenges, opportunities and next steps have been highlighted throughout this baseline report. The series of steps necessary to bring Stage 2 to a conclusion are to develop:

- A shared vision;
- Site wide strategies;
- Development Scenarios;
- Movement Framework; and a
- Preferred Development Scenario

The visioning process has begun in tandem with the baseline work and has helped inform some of the requirements for analysis in the baseline. The conclusion to this work is a framework that combines spatial design, identifying locations for intervention, infrastructure requirements, and guiding principles that cover:

- Character areas / key quarters / districts
- Key infrastructure investments required
- Natural Infrastructure
- Community infrastructure
- Townscape

In support of this will be a series of studies:

- Economic Analysis
- Surface water management and SUDS/green infrastructure design
- Climate Action Study

There will also be a series of statutory assessments:

- Stage 1 – Flood Risk Identification report
- SEA Screening (Strategic Environmental Assessment)
- AA Screening (Appropriate Assessment)

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